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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/884,860	06/19/2001	Patrick Harold Davis	089339-0324	1910

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SIEMENS CORPORATION  
INTELLECTUAL PROPERTY LAW DEPARTMENT  
170 WOOD AVENUE SOUTH  
ISELIN, NJ 08830

EXAMINER

GREEN, BRIAN

ART UNIT	PAPER NUMBER
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3611

DATE MAILED: 03/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/884,860

Applicant(s)

DAVIS ET AL.

Examiner

Brian K. Green

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Specification***

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The specification fails to include the following language appearing in claims 1 and 22, “a housing having a first structure defined on a first surface and a second structure defined on a second surface” and also “first structure being conformed to mate with said second structure, such that said first housing can be linked to a second housing”.

### ***Claim Objections***

Claim 22 is objected to because of the following informalities: In claim 22, line 6, “the two end caps” should be “the end caps” since there is no antecedent basis for “the two end caps”. In claim 22, as amended, the applicant left out the phrase “two end caps secured to the first housing” which appeared in claim 22 as originally filed. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-18, 20-22, 24-30, 32-38, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boshear et al. (U.S. Patent No. 5,665,938) in view of Tucker (U.S. Patent No. 6,314,669).

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Boshear et al. shows in figures 1-8 a transit sign comprising a first housing (1), electronic display (14,15), and end caps (4). The first housing has a first surface (the top surface of the housing) and a second surface (the bottom surface of the housing). In regard to claims 1-18,20-22,24-30,37,38, and 43, Boshear et al. does not disclose attaching structure on the first and second surfaces for allowing the housing be linked to a second housing. Tucker shows in figures 1-7 a first housing (12) which includes structure (42) on a first surface for mating with structure (holes) on the second surface (the bottom of the housing) for allowing the first housing to be mated with a second housing. In view of the teachings of Tucker it would have been obvious to one in the art to modify Boshear et al. by placing structure on the first and second surfaces since this would allow multiple housings to be interconnected together which would allow a larger display to be formed and would allow any sized display to be formed by varying the number of housings attached together. In regard to claims 1-3, Boshear et al. discloses in column 1, lines 10-15 that the sign can be used at train platforms, bus stations, etc. In regard to claim 4, Boshear et al. does not disclose whether the light sources are in the form of LEDs. Tucker discloses in the abstract that the display includes LEDs. In view of the teachings of Tucker it would have been obvious to one in the art to modify Boshear et al. by making the light sources in the form of LEDs since this would reduce the amount of heat generated by the light sources, would reduce power consumption, and would allow the light sources to last for a longer time period. In regard to claim 7, Tucker shows in figure 7 the idea of linking three housings together. In regard to claim 8, Boshear et al. discloses in column 2, lines 20-25 that the first housing is an extrusion. In regard to claim 9, Boshear et al. discloses the applicant's basic inventive concept except for the specific type of information is displayed by the electronic sign. Boshear et al. discloses in

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column 1, lines 10-15 that the sign can be used at train platforms, bust stations, etc. It would have been obvious to one in the art to modify Boshear et al. by making the sign display schedule, route information, or time remaining before a transit vehicle arrives since this is the type of information that is being displayed at train platforms and bus stations and further it is considered within one skilled in the art to display any type of information as desired. In regard to claim 10, Boshear et al. shows in figures 1 and 2 that the housing includes upper and lower legs that have matching slots to receive the lens (2) and electronic display (14,15). In regard to claim 11, Boshear et al. shows in figure 2 an overhang (the flange of the frame adjacent the lead line for numeral 13 in figure 2) extending from the upper leg. In regard to claim 12 and 13, as broadly defined, the lower leg includes a channel that includes openings (73) for draining water and further wherein the channel which receives the lens (2) is considered to be part of the same channel that includes the openings (73), i.e. the channel extends from in front of the lens to an area just behind the hose 12. In regard to claims 14 and 15, Boshear et al. shows in figure 2 that the slots are attached and retain a lens (2) and electronic display (14,15). In regard to claims 16-18, Boshear et al. does not disclose the idea of attaching a bracket to the first housing. Tucker shows in figure 6 a pair of brackets (46a, 46n) attached to the first housing. The brackets are attached with fasteners (152a-152n) that enter into the housing and enter into threaded members (151a-151n). In view of the teachings of Tucker it would have been obvious to one in the art to modify Boshear by attaching a bracket to the housing since this would allow the housing to be easily attached to an removed from a vertical support surface. In regard to claim 17, the fasteners (152a-152n) are considered to be studs. In regard to claim 18, the brackets are capable of supporting multiple housing. In regard to claims 20-22, attachment devices (152a-152n) and

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nuts (151a-151n) secure the housing to a support that includes mounting brackets (46a). In regard to claim 22, as broadly defined, the brackets (46a) are capable of performing the function of attaching the housing to a post. In regard to claim 22, the attachment devices (151a-151n) are hidden within the housing. In regard to claim 32, Boshear et al. does not disclose the use of hidden attachment devices. Tucker shows in figure 5 the use of hidden attachment devices (151a-151n) within the housing. In view of the teachings of Tucker it would have been obvious to one in the art to modify Boshear et al. by using hidden attachment devices since this would allow the brackets to be attached to the housing in an easier and more convenient manner. In regard to claim 37, Boshear et al. shows in figure 2 an overhang (the curved portion extending from the horizontal top surface) extending from the upper leg of the housing. In regard to claim 38, the overhang is considered to extend outward from the upper leg, see figure 2. In regard to claim 41, the first and second surfaces are on opposed sides of the first housing.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boshear et al. (U.S. Patent No. 5,665,938) in view of Tucker (U.S. Patent No. 6,314,669) as defined in claim 22 above and further in view of Potts (U.S. Patent No. 5,671,997).

Boshear et al. in view of Tucker disclose the applicant's basic inventive concept except for using tamper resistant screws to secure the end caps. Potts shows in figures 1 and 2 the use of tamper resistant screws (15) to secure a sign. In view of the teachings of Potts it would have been obvious to one in the art to modify Boshear et al. by using tamper resistant screws to secure the end panels since this would help to prevent unauthorized people from gaining access to the internal workings of the sign.

Claims 1-19, and 37-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boshear et al. (U.S. Patent No. 5,665,938) in view of Howard (U.S. Patent No. 5,379,540)..

Boshear et al. shows in figures 1-8 a transit sign comprising a first housing (1), electronic display (14,15), and end caps (4). The first housing has a first surface (the top surface of the housing) and a second surface (the bottom surface of the housing). Boshear et al. does not disclose attaching structure on the first and second surfaces for allowing the housing be linked to a second housing. Howard shows in figures 1-7 a first housing (14) which includes structure (26) on a first surface for mating with structure (34) on the second surface for allowing the first housing to be mated with a second housing. In view of the teachings of Howard it would have been obvious to one in the art to modify Boshear et al. by placing structure on the first and second surfaces since this would allow multiple housings to be interconnected together which would allow a larger display to be formed and would allow any sized display to be formed by varying the number of housings attached together. In regard to claims 1-3, Boshear et al. discloses in column 1, lines 10-15 that the sign can be used at train platforms, bus stations, etc. In regard to claim 4, Boshear et al. does not disclose whether the light sources are in the form of LEDs. The use of LED's are conventional in the art. It would have been obvious to one in the art to modify Boshear et al. by making the light sources in the form of LEDs since this would reduce the amount of heat generated by the light sources, would reduce power consumption, and would allow the light sources to last for a longer time period. In regard to claim 7, Howard shows in figure 1 the idea of linking three housings together. In regard to claim 8, Boshear et al. discloses in column 2, lines 20-25 that the first housing is an extrusion. In regard to claim 9,

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Boshear et al. discloses the applicant's basic inventive concept except for the specific type of information is displayed by the electronic sign. Boshear et al. discloses in column 1, lines 10-15 that the sign can be used at train platforms, bust stations, etc. It would have been obvious to one in the art to modify Boshear et al. by making the sign display schedule, route information, or time remaining before a transit vehicle arrives since this is the type of information that is being displayed at train platforms and bus stations and further it is considered within one skilled in the art to display any type of information as desired. In regard to claim 10, Boshear et al. shows in figures 1 and 2 that the housing includes upper and lower legs that have matching slots to receive the lens (2) and electronic display (14,15). In regard to claim 11, Boshear et al. shows in figure 2 an overhang (the flange of the frame adjacent the lead line for numeral 13 in figure 2) extending from the upper leg. In regard to claim 12 and 13, as broadly defined, the lower leg includes a channel that includes openings (73) for draining water and further wherein the channel which receives the lens (2) is considered to be part of the same channel that includes the openings (73), i.e. the channel extends from in front of the lens to an area just behind the hose 12. In regard to claims 14 and 15, Boshear et al. shows in figure 2 that the slots are attached and retain a lens (2) and electronic display (14,15). In regard to claims 16-18, Boshear et al. does not disclose the idea of attaching a bracket to the first housing. Howard shows in figures 1-2 a mounting bracket (19) includes studs (56) configured to engage a number of apertures in the first housing. In view of the teachings of Howard it would have been obvious to one in the art to modify Boshear by attaching a bracket to the housing since this would create a more aesthetically pleasing display. In regard to claim 19, Howard shows that the mounting bracket (19) includes a tab (56) which slides within a groove formed in the first housing, see figure 2. In regard to claim 37, Boshear et



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al. shows in figure 2 an overhang (the curved portion extending from the horizontal top surface) extending from the upper leg of the housing. In regard to claim 38, the overhang is considered to extend outward from the upper leg, see figure 2. In regard to claims 39 and 40, the member (34) is considered to be the tongue and the groove is considered to be the member (26) and first surface is considered to be "lower leg" and the second surface an "upper leg".

Claims 20-22,24-31,41, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boshear et al. (U.S. Patent No. 5,665,938) in view of Howard (U.S. Patent No. 5,379,540) as applied to claims 1-19,39, and 40 above and further in view of Dahl (U.S. Patent No. 4,753,027).

Boshear et al. in view of Howard disclose the applicant's basic inventive concept except for using a plurality of attachment devices to secure the housing to a signpost. Dahl shows in figure 2 the idea of using a plurality of attachment devices (22) to secure a sign to a signpost. In view of the teachings of Dahl it would have been obvious to one in the art to modify Boshear et al. by providing a plurality of attachment devices since this would allow the sign housing to be easily and securely attached to a post which would enable the sign to be seen in a better manner. In regard to claim 21, Dahl does not disclose whether a nut is attached to the end of the screws. It would have been obvious to one in the art to attach a nut to each of the screws since this would allow the sign housing to be attached to the post in a more secure manner. In regard to claims 29-31, Boshear et al. does not disclose the idea of attaching a bracket to the first housing.

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Howard shows in figures 1-2 a mounting bracket (19) includes studs (56) configured to engage a number of apertures/grooves in the first housing. Howard shows that the mounting bracket (19) includes a tab (56) which slides within a groove formed in the first housing, see figure 2. In regard to claims 41 and 42, the member (34) is considered to be the tongue and the groove is considered to be the member (26) and first surface is considered to be "lower leg" and the second surface an "upper leg".

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boshear et al. (U.S. Patent No. 5,665,938) in view of Howard (U.S. Patent No. 5,379,540) and Dahl (U.S. Patent No. 4,753,027) as applied to claim 22 above and further in view of Potts (U.S. Patent No. 5,671,997).

Boshear et al. in view of Howard and Dahl disclose the applicant's basic inventive concept except for using tamper resistant screws to secure the end caps. Potts shows in figures 1 and 2 the use of tamper resistant screws (15) to secure a sign. In view of the teachings of Potts it would have been obvious to one in the art to modify Boshear et al. by using tamper resistant screws to secure the end panels since this would help to prevent unauthorized people from gaining access to the internal workings of the sign.

Claims 32 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boshear et al. (U.S. Patent No. 5,665,938) in view of Dahl (U.S. Patent No. 4,753,027).

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Boshear et al. shows in figures 1-8 a transit sign comprising a first housing (1), electronic display (14,15), and end caps (4). The first housing has a first surface (the top surface of the housing) and a second surface (the bottom surface of the housing). Boshear et al. shows a lens (2) slidable attached with the upper and lower legs. Boshear et al. discloses the applicant's basic inventive concept except for using a hidden attachment means to secure the housing to a signpost. Dahl shows in figure 2 the idea of using a plurality of hidden attachment devices (22) to secure a sign to a signpost. In view of the teachings of Dahl it would have been obvious to one in the art to modify Boshear et al. by providing a plurality of attachment devices since this would allow the sign housing to be easily and securely attached to a post which would enable the sign to be seen in a better manner.

Claims 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boshear et al. (U.S. Patent No. 5,665,938) in view of Dahl (U.S. Patent No. 4,753,027) as applied to claims 22 and 32 above and further in view of Howard (U.S. Patent No. 5,379,540).

Boshear et al. does not disclose the idea of attaching a plurality of sign housing together. Howard shows in figures 1-7 the idea of combining a plurality of signs (12,14,16, and 18.) together. In view of the teachings of Howard it would have been obvious to one in the art to modify Boshear et al. by interconnecting multiple housings together since this would allow a larger display to be formed and would allow any sized display to be formed by varying the number of housings attached together.

***Response to Arguments***

Applicant's arguments filed Jan. 6, 2004 have been fully considered but they are not persuasive.

The applicant argues that Boshear et al. does not disclose anything on the outer housing to facilitate the attachment of two housings together as defined in claims 1 and 22. The housing structure of Boshear et al. has been modified in view of Tucker and in view of Howard to add structure to the housing in order to allow multiple housings to be attached together to create a larger display and allow any sized display to be formed by varying the number of housings attached together.

The applicant argues that Boshear et al. fails to disclose using hidden attachment devices to secure the housing to a post as defined in claim 22. In the Boshear et al. in view of Tucker rejection the fasteners (151a-151n) taught by Tucker are hidden and the attachment devices (including brackets 46a,46n) can be used to secure the housing to a post. In the Boshear et al. in view of Howard and Dahl rejection the fasteners (22) of Dahl are hidden and can be used to secure the housing to a post.

The applicant argues that claim 32 claims a housing which allows for the mounting device to be accessed from the interior of the sign, only after one of the end caps have been removed and Boshear et al., Tucker, and Dahl fail to show the claimed structure. Claim 32 defines an attachment means concealed within the housing and "accessible" by removing at least one of the end caps. Boshear et al. teaches the use of removable end caps. Tucker and Dahl teach the use of hidden attachment means. When the hidden attachment means are placed on the housing of Boshear et al. they would be "accessible" by removing one of the end caps.

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The applicant argues that new claim 37 is allowable since the prior art fails to show the linking structure defined therein and the overhang on the housing. Boshear et al. shows in figure 2 an overhang (the curved portion extending from the horizontal top surface) extending from the upper leg of the housing. Tucker and Howard teach the use of the linking structure, i.e. structure to allow multiple housings to be attached together.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian K. Green whose telephone number is (703) 308-1011. The examiner can normally be reached on M-F 7am-3:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley Morris can be reached on (703) 308-0629. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
BRIAN K. GREEN  
PRIMARY EXAMINER

Bkg  
March 22, 2004